

Date: Wednesday, 3/8/2006 10:38:02 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SHROUD ASSEMBLY
Job Number	: 26112 -2	Part Number	: D346719
Estimate Number	: 12198	Drawing Number	: D3467 REV.A
P.O. Number	: N/A	Project Number	: N/A
This Issue	: 3/8/2006 S.O. No. : N/A	Drawing Revision	: A
Prsht Rev.	: NC	Material	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Due Date	: 3/31/2006
Previous Run	: N/A	Qty:	20 Um: Each
Written By	: See comment below		
Checked & Approved By	: [Signature] 06.03.08		
Comment	: est rev. A 06.02.06 new issue EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	OUTSIDE SERVICE	OUTSIDE SERVICES
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Comment: Sub-Contracting Issue P/O: 00000768 06/03/09
 Email or Ship DXF file to vendor
 Laser Cut per Dwg D3467 flat pattern D3467-19F
 Material release note required

2.0	D346719F	DOUBLER FLAT PATTERN
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 12.0000 Each(s)
 DOUBLER FLAT PATTERN

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

06.03.22 (20)

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

06.03.22 (14) P/O

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1
 Form as per dwg D3467 using DT8852

06.03.25 (17)
 (14) P/O

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		One taken for lamp	JB	06/03/27	1	JB	JB

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/04/26
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/04/25	5	3 & rep	JB 06/04/25	destroy	JB 06/04/25	JB 06/04/25	JB 06/04/25	JB 06/04/25

NOTE: Date & initial all entries

Date: Wednesday, 3/8/2006 10:38:02 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHROUD ASSEMBLY

Job Number: 26112

Part Number: D346719

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 06/04/25 (14)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

Boben 25 (14)

8.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Boben 26 (14)

Job Completion



in 26.04.26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector



Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

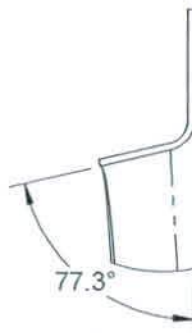
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

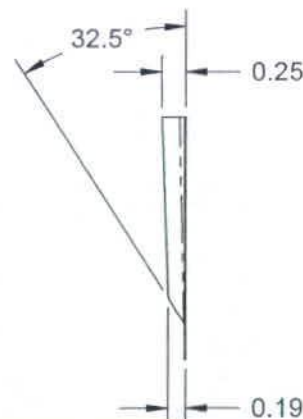
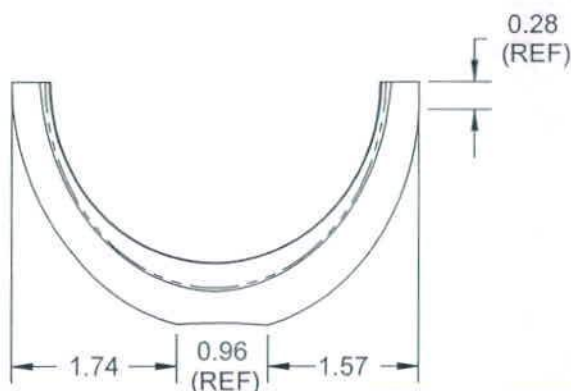
NOTE: Date & initial all entries

PRELIMINARY ISSUE

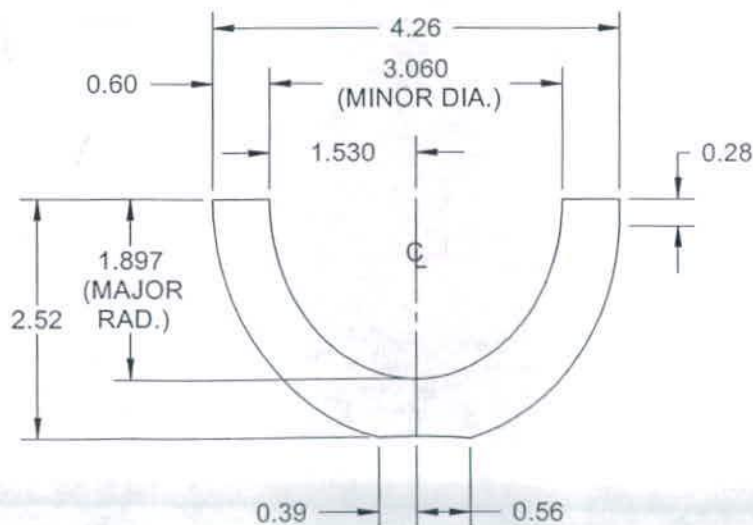
DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3467	REV. A SHEET 15 OF 15
DATE 05.12.07		TITLE SHROUD ASSEMBLY	SCALE 1:2



DETAIL I
SCALE 1:2



D3467-19 DOUBLER, LH SHOWN
D3467-20 DOUBLER, RH OPPOSITE



D3467-19F FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010


AK Steel		Metallurgical Test Report		Coshco, OH 43012		Fig 1	
AK Steel INTEGRIS METALS P.O. BOX 340 MINNEAPOLIS, MN 55440		INTEGRIS METALS 306 B STREET ALHAMBRA, WA 98001		PART NO. 72140-0191 PROCESSOR ORDER NO. 710672 BUYER'S ORDER NO. 710672		MILITARY ORDER NO. 72140-0191 PROCESSOR ORDER NO. 710672 BUYER'S ORDER NO. 710672	
HEAT 72140-0191		PARENT COIL ID 72140-0191		NET WEIGHT 4012 KG.		TOTAL BRIDS 4012 KG.	
SPECIFICATION 72140-0191		SPECIFICATION 72140-0191		SPECIFICATION 72140-0191		SPECIFICATION 72140-0191	
SERIALIZED 72140-0191		SERIALIZED 72140-0191		SERIALIZED 72140-0191		SERIALIZED 72140-0191	
TOTAL BRIDS 4012 KG.		TOTAL BRIDS 4012 KG.		TOTAL BRIDS 4012 KG.		TOTAL BRIDS 4012 KG.	
CHEMICAL ANALYSIS 72140-0191		CHEMICAL ANALYSIS 72140-0191		CHEMICAL ANALYSIS 72140-0191		CHEMICAL ANALYSIS 72140-0191	
SHIPPING DATE: 09/14/2005		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA		SOURCE AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING		ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.	
PRODUCT DESCRIPTION CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A	
ID 72140-0191		ID 72140-0191		ID 72140-0191		ID 72140-0191	
L. TENSILE 0.49		L. TENSILE 0.49		L. TENSILE 0.49		L. TENSILE 0.49	
C 0.04		C 0.04		C 0.04		C 0.04	
MN 1.39		MN 1.39		MN 1.39		MN 1.39	
P 0.01		P 0.01		P 0.01		P 0.01	
S 0.35		S 0.35		S 0.35		S 0.35	
SI 18.18		SI 18.18		SI 18.18		SI 18.18	
CR 0.05		CR 0.05		CR 0.05		CR 0.05	
MO 0.35		MO 0.35		MO 0.35		MO 0.35	
N 0.04		N 0.04		N 0.04		N 0.04	
CU 0.30		CU 0.30		CU 0.30		CU 0.30	
CO 0.12		CO 0.12		CO 0.12		CO 0.12	
REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA	
SHIPPING DATE: 09/14/2005		SHIPPING DATE: 09/14/2005		SHIPPING DATE: 09/14/2005		SHIPPING DATE: 09/14/2005	
SOURCE AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING		SOURCE AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING		SOURCE AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING		SOURCE AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING	
ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.		ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.		ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.		ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.	
PRODUCT DESCRIPTION CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		PRODUCT DESCRIPTION CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		PRODUCT DESCRIPTION CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		PRODUCT DESCRIPTION CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A	
CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A		CR. SET TYPE 304 STAINLESS STEEL SIMMER SLIT EDGE * AND SLIT * ALL TENS MODES HAVE BEEN MET UNLESS NOTED OTHERWISE * A	
ID 72140-0191		ID 72140-0191		ID 72140-0191		ID 72140-0191	
L. TENSILE 0.49		L. TENSILE 0.49		L. TENSILE 0.49		L. TENSILE 0.49	
C 0.04		C 0.04		C 0.04		C 0.04	
MN 1.39		MN 1.39		MN 1.39		MN 1.39	
P 0.01		P 0.01		P 0.01		P 0.01	
S 0.3							

INDUSTRIAL LASER P.O. - 110880 S.O. - 374786 ITEM 01 - 3 SHTS

3/13/06
604-946-4538
ATD: JTE

Ryerson 3/17/2006 1:57 PAGE 002/002 Fax Server

MAY-17-2005 16:05 FROM: INTEGRIS 253-288-3833 T-726 P. 008/015 F-537

		Metallurgical Test Report Coshocton Works Coshocton, OH 43812		Page 2 Lot# No. 7410672 BRN No. 7410672	
INTEL ORDER NO. 271345-0191 PROCESSOR ORDER NO. 427136-01 BUYER'S ORDER NO. 427136-01		PART NO. 7421407 ENG'S UNITS - PRODUCT - METRIC UNITS 8173 N001 4800 X COIL		5 1 0	
INTEGRIS METALS PO BOX 130 MINNEAPOLIS, MN 55440		INTEGRIS METALS 306 B STREET AUBURN, WA 98001		0 1 0	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	
PARENT COIL	POS	DIR	COND	ASTM	BRND
ID	(W/T)	(L, T, D)	ASTM	ASTM	ASTM
0549919-02	T		PASS	PASS	

THE CHEMICAL ANALYSIS AND PHYSICAL OR MECHANICAL TESTS REPORTED ABOVE ARE OBJECT
 AS CONTAINED IN THE RECORDS OF THIS CORPORATION.
 ALL TESTING IS DONE IN ACCORDANCE WITH ASTM STANDARDS UNLESS OTHERWISE NOTED
 AT Steel Corporation
 MAY 17 2005 16:05

THIS CERTIFIED TEST REPORT HAS BEEN OBTAINED TO A CONSUMER OF PHYSICAL PROPERTIES FROM AN
 REPUTABLE SOURCE. IT HAS BEEN OBTAINED BY AND UNDER THE NAME OF SUCH CONSUMER.
 DATE 05/17/2005 TIME 16:05 PM
 APPROVED BY: *[Signature]*

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 1
Heat/Lot : 86K8
TIN : B42748

Sold To: INTEGRIS METALS, LTD.
7910 40TH STREET SE
CALGARY, AB T2C2Y3

Ship To: ***CUSTOMER PICKUP***
4375 14TH STREET NORTHEAST
CALGARY
ABT3E7A9

Vendor Information

Cust PO #: 406824

Cust PO DT: 11/03/05

Specifications

STAINLESS STEEL SHEET, COLD ROLLED, ANNEALED AND PICKLED.
ASTMA240/04a 480/04a, 666/03, ASMESA240/04-A05, 480/04-A05, SA666/04
Q08766D-A X 1/8 PRM, AMS5513H X MRK&FIN, MIL5059D, AMD3, X CRWN MEAS
CORROSION: ASTM A262/02aB; 180Bend-OK
Buyer Part: 4288441
304 2B .1305 IN 48 IN 96 IN
Country of Origin: UNITED STATES

Mechanical Tests

		UOM	L	O	UOM	L	O
Yield Strength - 0.2% Offset	40	KSI	F	TRANSV			
Tensile Strength (UTS)	93.3	KSI	F	TRANSV			
Rockwell B	85		F	TRANSV			
Pct Uniform Elong 2 In/50mm	57.01	PCT	F	TRANSV			
Rockwell A	85		T	TRANSV			

Chemical Composition

C Carbon-Fct	.059	CR Chromium-Pct	18.360
CU Copper-Fct	.342	MN Manganese-Pct	1.643
MO Molybdenum-Pct	.285	N Nitrogen-Pct	.037
NI Nickel-Fct	8.150	P Phosphorus-Pct	.029
SI Silicon-Fct	.289		

Comments

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 2
Heat/Lot : 86K8
TIN : B42748

Material free from mercury contamination. No weld repairs.
EN 10204 3.1 PED 97/23/EC Annex1, Para. 4.3 Q08763F Cond A
This document certifies the material has been tested in
accordance with applicable specifications described herein
and has met those requirements.

QA by ERIC HESS 02/01/2006

Miscellaneous Data

GUELPH, ONT. K123
Control #: S/C60214
Part #: 74271441
.135 X .48 X .96

Date: 03/17/06

SOLD TO: IND. CUSTOMER

TO 110880

S/O 90-374786 - 02

[Signature] 3/17/06

The Chemical Analysis and Mechanical Test
data was received via EDI from the above
mentioned vendor.

INTEGRIS METALS, LTD.

0004/004
0002

INTEGRIS METALS

03/17/2006 14:18 FAX 6042729137
04/20/2015 08:27 FAX

